No. 637,386. Patented Nov. 21, 1899.

J. B. HALIFAX.

SEAT POST CLUSTER FOR VELOCIPEDES.

(Application filed Apr. 15, 1899.)

(No Model.)

Fig. 1.

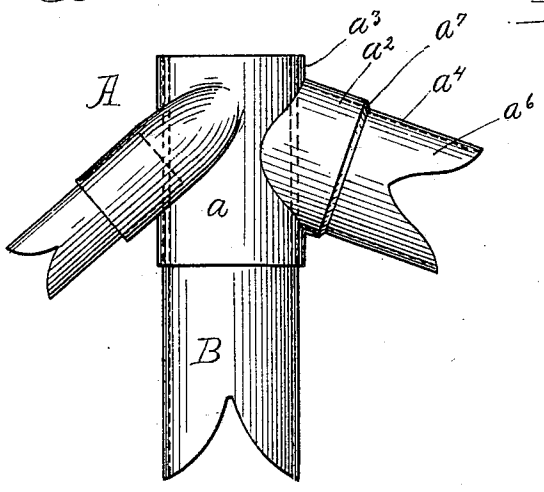


Fig. 2.

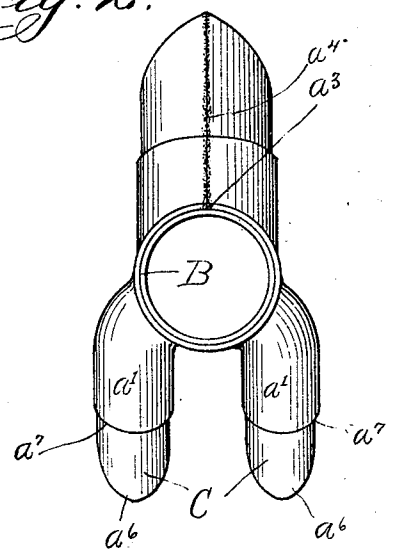


Fig. 3.

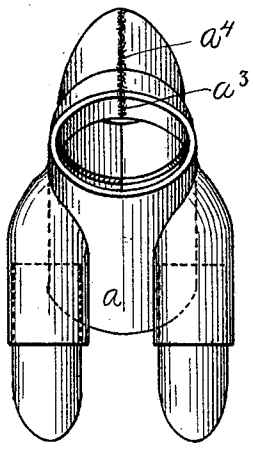
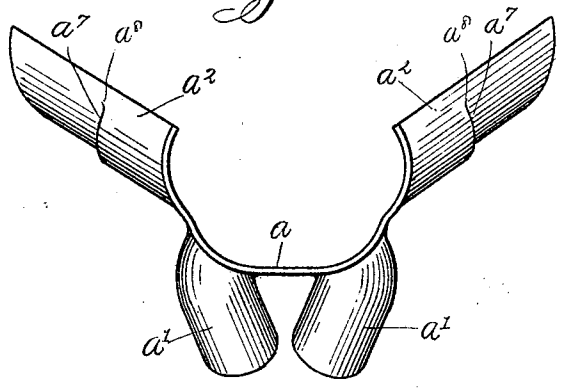


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN B. HALIFAX, OF CHICAGO, ILLINOIS.

SEAT-POST CLUSTER FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 637,386, dated November 21, 1899.

Application filed April 15, 1899. Serial No. 713,142. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. HALIFAX, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Seat-Post Clusters for Velocipedes, of which the following is a specification.

This invention relates to improvements in stamped or die-formed sheet-metal parts for velocipedes, and refers more specifically to an improved construction in seat-post "clusters," as that part of a velocipede-frame which forms the union-piece between the upper ends of the seat-post standard and rear forks and the rear end of the horizontal frame member is commonly termed.

The object of the invention is to provide a construction which may be more conveniently and economically manufactured, which possesses superior strength, and which in its finished form may be united with the several frame members with practically no special fitting of the latter and at the same time in such manner as to produce a more perfect flush-joint union.

To this end the invention consists in the matters hereinafter described, and more particularly pointed out in the appended claim, and it will be more readily understood by reference to the drawings in connection with the following description.

In said drawings, Figure 1 is a side elevation of a finished device embodying my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a rear view taken at right angles to the longitudinal axes of the rear-fork lugs. Fig. 4 is a top plan view of the main outer shell when partly formed and before the main seam thereof has been welded.

Referring to said drawings, A designates as a whole the main body of the union-piece, B the seat-post-standard reinforcement, and C C the rear-fork nipples. The part A comprises a cylindric body a, provided at one side with two integral nipple-bases a' or lugs drawn out by means of suitable dies from the body of the blank and arranged to project at the proper angle to receive the upper ends of the rear-fork members and provided also at its side opposite said rear-fork-nipple bases with two integral semitubular front-frame lugs a^2. The said main body is provided with a seam a^3, extending longitudinally of one side thereof, the two halves of the front-frame lug being formed at opposite sides of said seam, so that the upper and lower seams a^4 a^5, respectively, which unite the said parts, are arranged in the same plane with the seam a^3 of the main body, as indicated clearly in the several figures of the drawings.

The front-frame lug members a^2 are provided with reduced portions a^6, which are adapted to telescope within the end of the tubular front-frame member, an annular shoulder a^7 being formed at the junction of the reduced portion with the base portion a', against which the end of the frame-tube abuts, so as to form a flush joint.

The seam a^4, which extends through the upper side of the front-frame lug, and that portion of the seam a^3 which extends from the upper side of the front-frame lug to the top of the body are electrically welded, so that the finished device is practically seamless at this point, and in order to facilitate the welding of these seams in forming up the blank the annular shoulder a^7 is not carried entirely around the said lug, but is so constructed as to gradually run out and terminate at a short distance back from each edge of the upper side margins of the front-frame lug member, as indicated at a', Fig. 4. By so constructing the blank the marginal edges of the lug members which are to be welded will be left straight, and the lug may therefore be placed upon a smooth cylindric mandrel and hammered to complete the weld after heating, the mandrel or anvil being of course properly shaped to fit within the seamed part of the main body, so that the welding of the latter may be effected at the same operation. After the parts have been thus welded the device is struck with a suitably-shaped die, which completes the unfinished part of the annular shoulder and makes the form of the lug uniform throughout its circumference.

The seat-post-standard reinforcement B and the nipples proper C are simply tubular sections, which may or may not be seamless, as deemed preferable, inserted in the main body a and the nipple-bases a', respectively, and suitably secured therein either by brazing or otherwise. It is found in practice that it is unnecessary to braze or otherwise unite

the lower seams a^5 of the front-frame lug and the portion of the seam of the main body extending from the said lug to its lower end in preparing the device for market, since there is never any very great strain on these seam portions, and they will, moreover, be perfectly united at the time the frame members are united with the cluster. For this reason I have described the method of welding the upper side of the front-frame lug and adjacent seam portion of the main body only; but it will of course be understood that if deemed necessary the same method of forming the lower seams may be employed, and when so constructed the device in its finished state will be practically seamless.

From the foregoing it will be seen that I have provided a union-piece which may be conveniently formed from sheet-metal blanks by the use of simple dies and which is in its finished state exceedingly strong and light. It is also to be noted that the several frame members may be united with the cluster with practically no special fitting whatever and in such manner as to form a most perfect flush-joint.

I am aware that seat-post clusters of this general form having lugs of the same general form and arrangement, but made entirely integral with the main body, are known. The invention of the present device therefore resides in the details of construction, but at the same time these details may obviously be modified to a certain extent without departing from the invention.

I claim as my invention—

A seat-post cluster for velocipedes, comprising the cylindrical main body a, provided at one side with the integral nipple-bases a', and the inserted rear-fork nipples C, C, and at its side opposite the rear-fork nipples with the two halves a^2 of the front-frame lug formed integrally with the said body, the seam extending longitudinally through the body a and dividing the said front-frame lug, and the seat-post-standard reinforcement B, inserted in the body a, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two subscribing witnesses, this 10th day of April, A. D. 1899.

JOHN B. HALIFAX.

Witnesses:
C. H. FOSTER,
SIMON P. STAHL.